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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,959	02/05/2002	Mark Wise	THREEWI/P001A1	7927
29914	7590	08/11/2004	EXAMINER	
DKW LAW GROUP, P.C. 58TH FLOOR - USX TOWER 600 GRANT STREET PITTSBURGH, PA 15219			ORTIZ, BELIX M	
			ART UNIT	PAPER NUMBER
			2175	
DATE MAILED: 08/11/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/067,959	WISE ET AL.	
	Examiner	Art Unit	
	Belix M. Ortiz	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-53 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 February 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: in figure 2, reference characters "32", "42" and in figure 2F, reference character "254", and figure 5F are not described in the written description. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 3 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the drawings: character "510", in page 23, paragraph 105 is not shown on the drawings. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 23 is rejected under 35 U.S.C. 102(e) as being anticipated by Florance et al. (U.S publication 2003/0229592).

As to claim 23, Florance et al. teaches a database management system characterized in that the entire database is in one table, and the table has sets of records relating to each entity, and the records have an address field made up of a hierarchically ordered set of identifiers (see figure 44 and page 18, paragraph 222).

6. Claim 32 is rejected under 35 U.S.C. 102(e) as being anticipated by Brady (U.S patent 6,633,875).

As to claim 32, Brady teaches a computer-implemented data management method for managing information relating to entities, comprising, providing on a computer system, at least one table for a plurality of records, each of the plurality of records having an address field and a descriptor; and controlling the entry of new records in the table so that the address fields for all of the plurality of records define a semantic hierarchy among the plurality of records in the table (see abstract; figures 4, 8, and 12; column 1, lines 9-16; column 9, lines 33-35; column 10, lines 36-39; column 12, lines 9-34; and column 15, lines 13-15).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-6, 17-22, and 33-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady (U.S. patent 6,633,875) in view of Florance et al. (U.S. publication 2003/0229592).

As to claim 1, Brady teaches a computer-implemented method of managing listing information, relating to at least one property, for a real estate

database (see abstract; figures 4 and 8; and column 1, lines 9-16), the method comprising:

communicating the property specific information from the portable computing device to a server computer system (see figure 1; column 5, lines 50-58; and column 5, lines 8-12); and

adding, on the computer system, the property specific information as new records in a table having a plurality of records, each of the plurality of records including an address field and a descriptor; and controlling the entry of the new records in the table so that the address fields for all of the plurality of records define a semantic hierarchy among the plurality of records in the table (see figures 8, 9, and 12; column 9, lines 33-35; column 10, lines 36-39; column 12, lines 9-34; and column 15, lines 13-15);

wherein:

the address field comprises a hierarchically ordered set of identifiers (see column 12, lines 9-34);

the controlling of the entry of the new records includes (see column 16, lines 65-67 and column 17, lines 1-5), for each the property:

providing a highest level record in the table (see column 16, lines 6-11),

providing a plurality of records in the table semantically below the highest level record, each having the address field and the descriptor (see figure 12).

Brady does not teach at the property, entering property specific information into a portable computing device; for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record; and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record.

Florance et al., teaches a system and method for collection, distribution, and use of information in connection with commercial real estate (see abstract), in which he teaches at the property, entering property specific information into a portable computing device (see figure 2, character 105 and page 21, paragraph 251);

for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record (see figures 44 and 57); and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record (see figures 51 and 57).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady, to include at the property, entering property specific information into a portable computing device;

for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record; and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady by the teaching of Florance et al., because at the property, entering property specific information into a portable computing device;

for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record; and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same

position in the address field of the particular record, would enable the computer implementation, because it would have been obvious to combine the computer implementation of Brady with the portable computer of Florance et al. to make the data available to the user in anytime the user is mobile (see Florance et al. page 21, paragraph 252), and the semantic order will provide fast and easy access to the information.

As to claim 2, Brady as modified teaches wherein:

the address field comprises a hierarchically ordered set of identifiers (see Brady, column 12, lines 9-34); and

the controlling of the entry of the new records includes (see Brady, column 16, lines 65-67 and column 17, lines 1-5), for each of the entities:

providing a highest level record in the table associated with and descriptive of a property attribute (see Brady, figure 12);

providing a second highest level record in the table containing a plurality of attributes associated with and depending from the property attribute of the highest level record, the attributes being descriptive of a structure (see Brady, figure 13); and

providing a third highest level record in the table containing a plurality of attributes associated with and depending from the structure attribute of the second highest level record, the attributes being descriptive of a room attribute (see Brady, figure 13).

As to claim 3, Brady as modified teaches wherein also providing a fourth highest level record in the table containing at least one record having a field for entry of text descriptive information associated with and depending from the room attribute of the third highest level record (see Brady, figure 13, in where he teaches “average sqft of one bedroom”).

As to claim 4, Brady as modified teaches wherein further comprising the step of providing a user interface on the personal computing device having a field for displaying the successive levels of priority in hierarchical order, with which the current level is hierarchically associated (see Brady, figures 12 and 13).

As to claim 5, Brady as modified teaches wherein all records are stored in the same table (see Brady, column 10, lines 12-19).

As to claim 6, Brady as modified teaches wherein the portable computing device is a handheld computer (see Florance et al., figure 2, character 105 and page 18, paragraph 218).

As to claim 17, Brady teaches a computer-implemented method of cross referencing a relational database with a hierarchical database (see abstract; figures 4 and 8; column 1, lines 9-16; and column 9, lines 12-34) comprising the steps of:

writing the data to a database table consistent with the definitions set forth in the definitional document (see figure 2).

Brady does not teach creating a definitional document, the document containing a data dictionary assigning numeric address information consistent with the subject matter of the database;

loading a definitional document into a standard database format; and
accessing data from the definitional document for a programming language.

Florance et al., teaches a system and method for collection, distribution, and use of information in connection with commercial real estate (see abstract), in which he teaches creating a definitional document, the document containing a data dictionary assigning numeric address information consistent with the subject matter of the database (see page 4, paragraph 43; page 10, paragraph 130; and page 30, paragraph 346)

loading a definitional document into a standard database format (see page 21, paragraph 250); and

accessing data from the definitional document for a programming language (see figure 1; page 21, paragraph 250; and claim 33).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady, to include creating a definitional document, the document containing a data dictionary assigning numeric address information consistent with the subject matter of the database;

loading a definitional document into a standard database format; and
accessing data from the definitional document for a programming
language.

It would have been obvious to a person having ordinary skill in the
art at the time the invention was made to have modified Brady by the teaching of
Florance et al., because creating a definitional document, the document
containing a data dictionary assigning numeric address information consistent
with the subject matter of the database;

loading a definitional document into a standard database format; and
accessing data from the definitional document for a programming
language, would enables sellers to reach a larger and more qualified universe of
buyers, and enables buyers to more quickly and effectively find and evaluate
commercial properties for sale by instantly referencing correlating web-based
information (see Florance et al., page 4, paragraph 43).

As to claim 18, Brady as modified teaches wherein the definitional
document comprises a set of real estate descriptive definitions ordered
hierarchically to define a plurality of records in at least three levels of priority,
wherein a highest level record sets forth property descriptive information, a
second highest level record is associated with and depends logically from at least
one of the highest level records, and a third highest level record is associated
with and depends logically from at least one of the second highest level records

(see Florance et al., page 4, paragraphs 53 and 54 and page 18, paragraph 222).

As to claim 19, Brady as modified teaches wherein also comprising records in N additional hierarchical levels of priority, wherein N representing a positive integer, each the Nth level of priority associated with and depending logically from at least one of the (N-1) th level records (see Florance et al., figures 16 and 45 –50, where each figure represent different level (step) where (N-1) depend on what you did on step N).

As to claim 20, Brady as modified teaches wherein at least one of the records includes features associated with a next higher level record (see Florance et al., page 4, paragraph 53).

As to claim 21, Brady as modified teaches wherein at least one of the records includes features associated with a next higher level record (see Florance et al., page 4, paragraph 53).

As to claim 22, Brady as modified teaches wherein at least one of the records with a hierarchical database as set forth in includes features associated with a next higher level record (see Florance et al., page 4, paragraph 53).

As to claim 33, Brady teaches wherein:

the address field comprises a hierarchically ordered set of identifiers (see column 12, lines 9-34);

the controlling of the entry of the new records includes (see column 16, lines 65-67 and column 17, lines 1-5), for each the entities:

providing a highest level record in the table (see column 16, lines 6-11), and

providing a plurality of records in the table semantically below the highest level record, each having the address field and the descriptor (see figure 12).

Brady does not teach for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record; and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record.

Florance et al., teaches a system and method for collection, distribution, and use of information in connection with commercial real estate (see abstract), in which he teaches for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based

on a set of records in the table semantically above the given record (see figures 44 and 57); and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record (see figures 51 and 57).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady, to include for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record; and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady by the teaching of Florance et al., because for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record; and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record, would enable the computer implementation, because it would have been obvious to combine the computer implementation of Brady with the portable computer of Florance et al. to make the data available to the user in anytime the user is mobile (see Florance et al. page 21, paragraph 252), and the semantic order will provide fast and easy access to the information.

As to claim 34, Brady as modified teaches wherein one of the records further includes feature information (see Brady, column 10, lines 36-39).

As to claim 35, Brady as modified teaches the data management method, further comprising a step of providing a user interface for use with the computer system (see Brady, figures 3-7 and column 5, lines 8-11), the user interface comprising:

a selection element responsive to user inputs to select one of a plurality predetermined selectable values (see Brady, column 14, lines 36-39);

a navigation element responsive to user inputs to manipulate the selection element to display ones of the plurality of predetermined selectable values, and

to indicate a selection of one of the predetermined selectable values (see

Florance et al., figures 51, 53, and 54); and

a designation element responsive to user inputs to store in the table a new record having the descriptor based on the selection of the one of the predetermined selectable values (see Brady, figures 8, 9, and 12; column 9, lines 33-35; column 10, lines 36-39; column 12, lines 9-34; and column 15, lines 13-15).

As to claim 36, Brady as modified teaches wherein the user interface further comprises a hierarchical orientation element showing descriptor information for the set of records in the table semantically above the new record (see Florance et al., figure 44 and page 18, paragraph 222).

As to claim 37, Brady as modified teaches wherein all of the plurality of records are stored in the same table (see Florance et al., figures 51 and 53).

As to claim 38, Brady as modified teaches wherein all of the plurality of records are stored in only a single table (see Florance et al., figures 51, 53, and 57).

As to claim 39, Brady teaches a computer system for implementing a data management method of managing information relating to entities (see Abstract; figures 4 and 7; and column 1, lines 9-16), comprising:

controlling the entry of new records in the table so that the address fields for all of the plurality of records define a semantic hierarchy among the plurality of records in the table (see abstract; figures 4, 8, and 12; column 1, lines 9-16; column 9, lines 33-35; column 10, lines 36-39; column 12, lines 9-34; and column 15, lines 13-15).

Brady does not teach a processor; and
a memory under control of the processor, with computer instructions for causing the processor to perform the steps of:

providing, on the computer system, at least one table for a plurality of records, each of the plurality of records having an address field and a descriptor.

Florance et al., teaches a system and method for collection, distribution, and use of information in connection with commercial real estate (see abstract), in which he teaches a processor (see page 33, paragraph 380); and
a memory under control of the processor, with computer instructions for causing the processor (see page 33, paragraph 380) to perform the steps of:

providing, on the computer system, at least one table for a plurality of records, each of the plurality of records having an address field and a descriptor (see figures 51 and 53).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady, to include a processor; and

a memory under control of the processor, with computer instructions for causing the processor to perform the steps of:

providing, on the computer system, at least one table for a plurality of records, each of the plurality of records having an address field and a descriptor.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady by the teaching of Florance et al., because a processor; and

a memory under control of the processor, with computer instructions for causing the processor to perform the steps of:

providing, on the computer system, at least one table for a plurality of records, each of the plurality of records having an address field and a descriptor, would enable a computer program, because with this information in the database, in response to receipt of the data pertaining to the user's location, the computer automatically retrieves information describing the commercial or residential real estate near the user's location and transmits the same to the user's equipment set for display on the display", (see Florance et al., page 10, paragraph 129).

As to claim 40, Brady as modified teaches wherein:
the address field comprises a hierarchically ordered set of identifiers (see Brady, column 12, lines 9-34);

the controlling of the entry of the new records includes (see Brady,

column 16, lines 65-67 and column 17, lines 1-5), for each the entities:

providing a highest level record in the table (see Brady, column 16, lines 6-11), and

providing a plurality of records in the table semantically below the highest level record, each having the address field and the descriptor (see Brady, figure 12):

for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record (see Florance et al., figures 44 and 57); and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record (see Florance et al., figures 51 and 57).

As to claim 41, Brady as modified teaches wherein one of the record further includes feature information (see Brady, column 10, lines 36-39).

As to claim 42, Brady as modified teaches the computer system for implementing the data management method, the steps further comprising a step

of providing a user interface for use with them computer system (see Brady, figures 3-7 and column 5, lines 8-11), the user interface comprising:

a selection element responsive to user inputs to select one of a plurality predetermined selectable values (see Brady, column 14, lines 36-39);

a navigation element responsive to user inputs to manipulate the selection element to display ones of the plurality of predetermined selectable values and to indicate a selection of one of the predetermined selectable values (see Florance et al., figures 51, 53, and 54); and

a designation element responsive to user inputs to store in the table a new record having the descriptor based on the selection of the one of the predetermined selectable values (see Brady, figures 8, 9, and 12; column 9, lines 33-35; column 10, lines 36-39; column 12, lines 9-34; and column 15, lines 13-15).

As to claim 43, Brady as modified teaches wherein the user interface further comprises a hierarchical orientation element showing descriptor information for the set of records in the table semantically above the new record (see Florance et al., figure 44 and page 18, paragraph 222).

As to claim 44, Brady as modified teaches wherein all of the plurality of records are stored in the same table (see Florance et al., figures 51 and 53).

As to claim 45, Brady as modified teaches wherein all of the plurality of records are stored in only a single table (see Florance et al., figures 51, 53, and 57).

As to claim 46, Brady teaches a computer program product for enabling a computer system to implement a data management method of managing information relating to entities (see abstract; figures 4 and 8; and column 1, lines 9-16), comprising:

a computer readable medium (see figures 1 and 2), and
computer instructions, on the computer readable medium (see figures 1 and 2), adapted to cause a computer to perform the steps of:

controlling the entry of new records in the table so that the address fields for all of the plurality of records define a semantic hierarchy among the plurality of records in the table (see abstract; figures 4, 8, and 12; column 1, lines 9-16; column 9, lines 33-35; column 10, lines 36-39; column 12, lines 9-34; and column 15, lines 13-15).

Brady does not teach providing, on the computer system, at least one table for a plurality of records, each of the plurality of records having an address field and a descriptor.

Florance et al., teaches a system and method for collection, distribution, and use of information in connection with commercial real estate (see abstract), in which he teaches providing, on the computer system, at least one table for a plurality of records, each of the plurality of records having an address field and a descriptor (see figures 51 and 53 and page 10, paragraph 129)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady, to include providing, on the computer system, at least one table for a plurality of records, each of the plurality of records having an address field and a descriptor

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady by the teaching of Florance et al., because providing, on the computer system, at least one table for a plurality of records, each of the plurality of records having an address field and a descriptor, would enable a computer program, because with this information in the database, in response to receipt of the data pertaining to the user's location, the computer automatically retrieves information describing the commercial or residential real estate near the user's location and transmits the same to the user's equipment set for display on the display", (see Florance et al., page 10, paragraph 129).

As to claim 47, Brady as modified teaches wherein:

the address field comprises a hierarchically ordered set of identifiers (see Brady, column 12, lines 9-34);

the controlling of the entry of the new records includes (see Brady, column 16, lines 65-67 and column 17, lines 1-5), for each the entries:

providing a highest level record in the table (see Brady, column 16, lines 6-11), and

providing a plurality of records in the table semantically

below the highest level record, each having the address field and the descriptor (see Brady, figure 12);

for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record (see Florance et al., figures 44 and 57); and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record (see Florance et al., figures 51 and 57).

As to claim 48, Brady as modified teaches wherein one of the record further includes feature information (see Brady, column 10, lines 36-39).

As to claim 49, Brady as modified teaches the computer system for implementing the data management method, the steps further comprising a step of providing a user interface for use with them computer system (see Brady, figures 3-7 and column 5, lines 8-11), the user interface comprising:

a selection element responsive to user inputs to select one of a plurality predetermined selectable values (see Brady, column 14, lines 36-39);

a navigation element responsive to user inputs to manipulate the selection element to display ones of the plurality of predetermined selectable values and to indicate a selection of one of the predetermined selectable values (see Florance et al., figures 51, 53, and 54); and

a designation element responsive to user inputs to store in the table a new record having the descriptor based on the selection of the one of the predetermined selectable values (see Brady, figures 8, 9, and 12; column 9, lines 33-35; column 10, lines 36-39; column 12, lines 9-34; and column 15, lines 13-15).

As to claim 50, Brady as modified teaches wherein the user interface further comprises a hierarchical orientation element showing descriptor information for the set of records in the table semantically above the new record (see Florance et al., figure 44 and page 18, paragraph 222).

As to claim 51, Brady as modified teaches wherein all of the plurality of records are stored in the same table (see Florance et al., figures 51 and 53).

As to claim 52, Brady as modified teaches wherein all of the plurality of records are stored in only a single table (see Florance et al., figures 51, 53, and 57).

As to claim 53, Brady teaches a computer-implemented method of obtaining listing information, relating to at least one property, for a real-estate database (see abstract; figures 4 and 8; column 1, lines 9-16; column 1, lines 65-67; and column 2, lines 1-3), the method comprising:

communicating the property specific information from the portable computing device to a server computer system (see figure 1; column 5, lines 50-58; and column 5, lines 8-12); and

adding, on the computer system, the property specific information as new records in a table having a plurality of records, each of the plurality of records including an address field and a descriptor; and controlling the entry of the new records in the table so that the address fields for all of the plurality of records define a semantic hierarchy among the plurality of records in the table (see figures 8, 9, and 12; column 9, lines 33-35; column 10, lines 36-39; column 12, lines 9-34; and column 15, lines 13-15);

wherein:

the address field comprises a hierarchically ordered set of identifiers (see column 12, lines 9-34);

the controlling of the entry of the new records includes (see column 16, lines 65-67 and column 17, lines 1-5), for each the property:

providing a highest level record in the table (see column 16, lines 6-11),

providing a plurality of records in the table semantically

below the highest level record, each having the address field and the descriptor (see figure 12).

Brady does not teach at the property, entering property specific information into a portable computing device; for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record; and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record.

Florance et al., teaches a system and method for collection, distribution, and use of information in connection with commercial real estate (see abstract), in which he teaches at the property, entering property specific information into a portable computing device (see figure 2, character 105);

for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record (see figures 44 and 57); and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the

given record has at least one identifier not appearing identically in the same position in the address field of the particular record (see figures 51 and 57).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady, to include at the property, entering property specific information into a portable computing device;

for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record; and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady by the teaching of Florance et al., because at the property, entering property specific information into a portable computing device;

for each given record of the plurality of records other than ones having the highest level, the semantic meaning of the descriptor is based on a set of records in the table semantically above the given record; and

a particular record is a member of the set of records semantically above the given record when all of the identifiers of the particular record appear

identically in the same positions in the address field of the given record but the given record has at least one identifier not appearing identically in the same position in the address field of the particular record, would enable the computer implementation, because it would have been obvious to combine the computer implementation of Brady with the portable computer of Florance et al. to make the data available to the user in anytime the user is mobile (see Florance et al. page 21, paragraph 252), and the semantic order will provide fast and easy access to the information.

9. Claims 7-16 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brady (U.S. patent 6,633,875) in view of Florance et al. (U.S. publication 2003/0229592) as applied to claims 1-6, 17-22, 24-29, and 33-53 above, and further in view of Orbanes et al. (U.S. publication 2002/0109680).

As to claim 7, Brady as modified still does not teach wherein the method further comprises providing an extensible markup language (XML) script, executable on the handheld computer, the XML script including a set of definitions being further defined and associated in a hierarchical addressing scheme.

Orbanes teaches a method for viewing information in virtual space (see abstract), in which he teaches wherein the method further comprises providing an extensible markup language (XML) script, executable on the handheld computer, the XML script including a set of definitions being further defined and

associated in a hierarchical addressing scheme (see figure 15; page 4, paragraph 45; and page 12, paragraph 105).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady, as modified to include wherein the method further comprises providing an extensible markup language (XML) script, executable on the handheld computer, the XML script including a set of definitions being further defined and associated in a hierarchical addressing scheme.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady as modified by the teaching of Florance et al., because wherein the method further comprises providing an extensible markup language (XML) script, executable on the handheld computer, the XML script including a set of definitions being further defined and associated in a hierarchical addressing scheme, would enable the computer implementation, because this method is in a hierarchical data structure is one that follows a common language standard XML, (see Orbanes et al., page 12, paragraph 105).

As to claim 8, Brady as modified teaches wherein the table of hierarchically addressed fields being extensible without limitation to include additional the address fields, the address fields having an association with and depending logically from at least one of the logically higher levels of record (see Brady, column 12, lines 30-32).

As to claim 9, Brady as modified teaches wherein also providing means for capturing digital video images describing the next higher level record (see Florance et al., abstract; figure 2, character 115 and page 10, paragraph 130).

As to claim 10, Brady as modified teaches wherein the means for capturing digital video images comprises a digital camera coupled with a handheld computer having means for storing and addressing the video image (see Florance et al., figure 2, characters 105 and 115).

As to claim 11, Brady as modified teaches wherein the digital camera being integrally mounted on the handheld personal digital computer (see Brady, figure 2).

As to claim 12, Brady as modified teaches wherein also providing means for electronically measuring and recording dimensions associated with an attribute of one of the records in a the next higher level record (see Florance et al., page 18, paragraph 221 and page 31, paragraph 364).

As to claim 13, Brady as modified teaches wherein the means for electronically measuring and recording dimensions comprises an infrared (IR) measuring device coupled with a handheld personal digital computer for storing and addressing the dimensions (see Florance et al., page 6, paragraph 69).

As to claim 14, Brady as modified teaches wherein the IR measuring device being integrally mounted on the handheld personal digital computer (see Florance et al., page 6, paragraph 69).

As to claim 15, Brady as modified teaches wherein the handheld personal digital computer operable by means of a computer application responsive to voice commands, the handheld computer having the ability to interpret voice signals for insertion of data related to the real estate (see Florance et al., figure 2 and page 16, paragraph 203).

As to claim 16, Brady as modified teaches wherein combining digital camera, IR and voice recognition in table for creation of virtual tour, comprising visual, audio and text descriptions within a the listing, the descriptions being displayable on a handheld computer (see Florance et al., page 6, paragraph 68 and page 21, paragraph 251).

As to claim 30, Brady as modified still does not teach wherein the program being written in extensible markup language (XML).

Orbanes teaches a method for viewing information in virtual space (see abstract), in which he teaches wherein the program being written in extensible markup language (XML) (see figure 15 and page 4, paragraph 45).

Therefore, it would have been obvious to a person having ordinary

skill in the art at the time the invention was made to have modified Brady, as modified to include wherein the program being written in extensible markup language (XML).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Brady as modified by the teaching of Florance et al., because wherein the program being written in extensible markup language (XML), would enable the computer implementation, because this method is in a hierarchical data structure is one that follows a common language standard XML, (see Orbanes et al., page 12, paragraph 105).

As to claim 31, Brady as modified teaches wherein the computer software application is an Internet-based application accessible by the users via the Internet, the users having at least one assigned security access code for verifying the user authorization (see Florance et al., page 8, paragraph 105 and page 37, claim 1).

10. Claims 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Florance et al. (U.S. publication 2003/0229592) in view of Brady (U.S. patent 6,633,875).

As to claim 24, Florance et al., teaches providing at least one portable handheld computer device having a computer-readable interactive program

installed thereon and executable by an operating system associated with the handheld computer device (see figure 2 and page 18, paragraph 218);

providing a communications link between the handheld computer device and an intermediate computer storage device for downloading the records for storage on the intermediate computer storage device (see figure 2 and page 6, paragraph 68);

providing a computer network connecting the intermediate computer storage device to at least one central file server (see figure 2, character 170 and page 21, paragraph 253);

transferring the downloaded records from the intermediate computer storage device to the at least one central file server (see figure 2, characters 105 and 170); and

incorporating a plurality of the records into a cumulative, hierarchically organized file system (see page 8, paragraph 103 and page 18, paragraph 222).

accessing the file system via the computer network according to a predefined set of user security codes for retrieval of at least a portion of the listing data sets for use in compiling and disseminating the listing data records in a plurality of formats adapted for marketing real estate entities (see figure 2 and page 30, paragraph 346).

Florance does not teach a computer-implemented method of creating, storing and managing real estate listing data records in a hierarchical database comprising the steps of:

operating by at least one user the interactive program to create at least one record associated with one or more properties, the at least one record including a hierarchically arranged plurality of descriptors for describing one or more real estate entities.

Brady teaches a computer database system and method for collecting and reporting real estate property and loan performance information over a computer driven network (see abstract), in which he teaches a computer-implemented method of creating, storing and managing real estate listing data records in a hierarchical database (see column 1, lines 65-67; and column 2, lines 1-3) comprising the steps of:

operating by at least one user the interactive program to create at least one record associated with one or more properties, the at least one record including a hierarchically arranged plurality of descriptors for describing one or more real estate entities (see column 9, lines 33-35; column 10, lines 12-15; and column 13, lines 3-4).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Florance et al., to include a computer-implemented method of creating, storing and managing real estate listing data records in a hierarchical database comprising the steps of:

operating by at least one user the interactive program to create at least one record associated with one or more properties, the at least one record

including a hierarchically arranged plurality of descriptors for describing one or more real estate entities.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Florance et al. by the teaching of Brady, because a computer-implemented method of creating, storing and managing real estate listing data records in a hierarchical database comprising the steps of:

operating by at least one user the interactive program to create at least one record associated with one or more properties, the at least one record including a hierarchically arranged plurality of descriptors for describing one or more real estate entities, would enable a computer implementation to be more friendly with the user that is looking for information about real estate because the information have a hierarchical order with associated real estate description.

As to claim 25, Florance et al., teaches providing at least one portable handheld computer device having a computer-readable interactive program installed thereon and executable with an operating system associated with the handheld computer device (see figure 2 and page 18, paragraph 218),

the interactive program having a menu-driven format, with a plurality of main menu selections displayed (see figure 3), and a first the menu selection being to enter a new listing, a second the menu selection being to open an existing listing, and a third the menu

selection being to delete a listing (see figure 1, characters A52- A56 and page 6, paragraphs 75-78);

displaying a prompt to identify a new listing responsive to user's selection to enter a new listing and, displaying a plurality of first level categories from which the user may select for entering into a listing data set (see figure 7);

displaying a plurality of second level categories if one of the first level categories is selected, and if an item is selected from second level categories (see figures 52 and 53),

displaying at least one of third level categories to associate with the second level category (see figures 53 and 54);

displaying at least one subcategory to associate with the each preceding level category up to a fifth level category (see figures 52-56);

optionally repeating the selection steps as desired to collect a set of selections that comprise a substantially complete set of descriptors of an associated property listing (see figures 53 and 57); and

if the user selects open listing, the first level categories are displayed again, such that data associated with the listing already in the database can be supplemented or modified as the steps of a new listing are repeated (see figure 52 and figure 59 "home");

if the user selects delete listing, displaying a complete picklist of listing records all the first level categories are displayed again, such that records may be selected for deletion (see page 6, paragraphs 75-78 and page 26, paragraph 307); providing a communications link between the handheld computer device and an intermediate computer storage device for downloading the sets of data for storage on the intermediate computer storage device (see figure 2 and page 6, paragraph 68);

providing a computer network connecting the intermediate computer storage device to at least one central file server (see figure 2, character 170 and page 21, paragraph 253);

transferring the downloaded sets of listing data from the intermediate computer storage device to the at least one central file server (see figure 2, characters 105 and 170);

incorporating a plurality of the sets of listing data into a cumulative, hierarchically organized file system (see page 8, paragraph 103 and page 18, paragraph 222); and

accessing the file system via the computer network according to a predefined set of user security codes for retrieval of at least a portion of the listing data sets for use in compiling and disseminating listing data records in a plurality of formats adapted for marketing real estate entities (see figure 2 and page 30, paragraph 346).

Florance et al. does not teach a computer-implemented method for creating, storing and managing real estate listing data in a hierarchical database comprising the steps of:

at least one user operating the interactive program to create at least one set of the listing data associated with one or more properties, the at least one set of listing data including a hierarchically arranged plurality of descriptors for describing one or more real estate entities.

Brady teaches a computer database system and method for collecting and reporting real estate property and loan performance information over a computer driven network (see abstract), in which he teaches a computer-implemented method for creating, storing and managing real estate listing data in a hierarchical database (see column 1, lines 65-67 and column 2, lines 1-3) comprising the steps of:

at least one user operating the interactive program to create at least one set of the listing data associated with one or more properties, the at least one set of listing data including a hierarchically arranged plurality of descriptors for describing one or more real estate entities (see column 9, lines 33-35; column 10, lines 12-15; and column 13, lines 3-4).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Florance et al., to include a computer-implemented method for creating, storing and managing real estate listing data in a hierarchical database comprising the steps of:

at least one user operating the interactive program to create at least one set of the listing data associated with one or more properties, the at least one set of listing data including a hierarchically arranged plurality of descriptors for describing one or more real estate entities.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Florance et al. by the teaching of Brady, because a computer-implemented method for creating, storing and managing real estate listing data in a hierarchical database comprising the steps of:

at least one user operating the interactive program to create at least one set of the listing data associated with one or more properties, the at least one set of listing data including a hierarchically arranged plurality of descriptors for describing one or more real estate entities, would enable a computer implementation to be more friendly to the user that is looking for information about real estate because the information have a hierarchical order with associated real estate description.

As to claim 26, Florance et al. as modified teaches wherein the computer network is the Internet and is accessed using a web browser having a user interface including navigation elements for selection of items for inclusion in a set of listing data (see Brady, column 5, lines 8-16).

As to claim 27, Florance et al. as modified teaches wherein also providing a middleware program adapted to translate data from the central database to user programs written for access to a second database (see Brady, figure 2).

As to claim 28, Florance et al., teaches an interactive program having a menu-driven format, with a plurality of main menu selections displayed, a first the menu selection being to enter a new listing, a second the menu selection being to open an existing listing, and a third the menu selection being to delete a listing (see figure 1, characters A52-A56; figure 3; and page 6, paragraph 75-78);

displaying a prompt to identify a new listing responsive to user's selection to enter a new listing and, displaying a plurality of first level categories from which the user may select for entering into a record (see figure 7);

a plurality of second level categories if one of the first level categories is selected, and if an item is selected from second level categories (see figures 52-53),

at least one third level category to associate with one of the second level categories (see figures 53-54);

at least one subcategory to associate with the each higher level category up to a fifth level category (see figures 52-56);

each of the categories at every level being semantically associated with the next higher level (see figures 52-56);

means for repeating the selection steps as desired to collect a set of selections that comprise a substantially complete set of descriptors of an associated property listing (see figures 54-57);

the at least one record including a hierarchically arranged plurality of descriptors for describing one or more real estate entities (see page 8, paragraph 103 and page 18, paragraph 222); and

a communications link for transmitting the records for storage in a central database (see figure 2, character 170 and page 21, paragraph 253).

Florance et al. does not teach a computer software application for creating data records associated with one or more real estate listings comprising:

means for storing the one or more records locally;

means to edit any of the stored records; and

means to delete one or more of the stored records.

Brady teaches a computer database system and method for collecting and reporting real estate property and loan performance information over a computer driven network (see abstract), in which he teaches a computer software application for creating data records associated with one or more real estate listings (see column 1, lines 65-67; column 2, lines 1-3; and column 8, lines 20-26) comprising:

means for storing the one or more records locally (see abstract; column 1, lines 65-67; and column 2, lines 1-3);

means to edit any of the stored records (see column 20, lines 43-45);

means to delete one or more of the stored records (see column 21, lines 7-9);

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Florance et al., to include a computer software application for creating data records associated with one or more real estate listings comprising:

means for storing the one or more records locally;

means to edit any of the stored records; and

means to delete one or more of the stored records.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Florance et al. by the teaching of Brady, because a computer software application for creating data records associated with one or more real estate listings comprising:

means for storing the one or more records locally;

means to edit any of the stored records; and

means to delete one or more of the stored records, would enables sellers to reach a larger and more qualified universe of buyers, and enables buyers to more quickly and effectively find and evaluate commercial properties for sale by instantly referencing correlating web-based information (see Florance et al., page 4, paragraph 43).

As to claim 29, Florance et al. as modified teaches wherein the program is executable on a portable handheld computer device means is a Hotsync@

conduit storage means is a read only memory device capable of storing up to 32 MB of data (see Brady, column 14, line 56).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Belix M. Ortiz whose telephone number is 703-305-7605. The examiner can normally be reached on moday-friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

bmo

July 20, 2004.



SAM RIMELL
PRIMARY EXAMINER